





FIG. 2

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Main Menu
Get a Quote/Account
Account
Mask Order
Info
Feedback
Help
Logout

Please choose from the menu of choices below.

New Customers

Get a Quote/Account

21 Choose this link if you are a new customer and do not have an account and password yet. It allows you to request a new quote, and/or request an Order Form account.

Existing Customers

Enter your user name and password, choose a task, and click the "Go" button.

User Name:

Password:

I want to: Create a New Order 22

All transactions are protected with SSL, the strongest browser encryption technology available on the web.

30a {

Main Menu Get a Quote/Account Account Mask Order Info Feedback
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Instructions General Layers Patterns Placements Fractures Business Submit

Please create your new order by completing as thoroughly as possible the following fields, then pressing the "Save and Forward" button to progress to *Layer Information*, the next step of the Mask Order Wizard.

To get help for any field, hold your mouse cursor over that field's help icon (?).

30 {

Other Methods For Working With Orders

Reload an In-progress Order:

Create New Order Based On Old:

33 {

Customer Information Quality Control

Customer: !

Fab: ?

Contact Name: !

Phone: !

Fax: !

E-mail: !

Defect Criteria: !

34 {

Documentation

Plot Size: !

32 {

TO FIG. 3B
FIG. 3A

FIG. 3B
FROM FIG. 3A

Required Order Information

This information is required immediately in order to accurately generate the layer & pattern information screens.

Device: !

Number of Layers: !

Number of Unique Device Patterns: !

Tooling and Materials

Product Type: !
Other:

Glass Type: !

Glass Size & Thickness: !

Coating: !

Reflectivity: % ?

Pellicles

Chrome-side? No ?

Glass-side? No ?

Stepper Manufacturer: ?
Other:

Stepper Model: ?

Chrome-side Part Number: ?

Glass-side Part Number: ?

Compacts

Compact Part Number: ?

Navigation

? =Optional for order ! =Required for submit, optional for this screen ! =Required for this screen

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In Progress

TestCompany
View summary

Please complete the information for each layer, and press the "Save and Forward" button to progress to *Pattern Identification*.

If the number of layers that appear on this screen is wrong, please return to the Basic Info Screen and correct the number of layers, then return to this screen.

Layers 1 - 1 of 1
← Save And Back
Save And Stay
Save And Forward →

Layer	Mask Title	Barcode Text	Reg Tolerance	Defect Size	Defect Density	Mask Parity	Title Parity
1							

Barcode Type:

Max Barcode Text Length:

Parity Examples:

Right Reading: Right Reading

Wrong Reading: gnirboeЯ gnoɹW

← Save And Back
Save And Stay
Save And Forward →

ⓘ = Optional for order ⓘ = Required for submit, optional for this screen ⓘ = Required for this screen

FIG. 4

**NETWORK-BASED PHOTOMASK DATA ENTRY
INTERFACE & INSTRUCTION GENERATOR FOR
MANUFACTURING PHOTOMASKS**

Atty Dkt: 064441.0285
Inventors: Jeffrey S. Schepp et al.
Filing Date: 9/8/2003 Sheets: 6 of 12

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TestCompany
[View summary](#)
In Progress

Please complete the information for each distinct pattern, and press the "Save and Forward" button to progress to *Pattern Placement*.

If the number of patterns or layer information is wrong, please return to the General Info Screen and correct the number of distinct patterns, then return to this screen.

← Save And Back
Save And Stay

Save And Forward →

Patterns 1 - 1 of 1
Layers 1 - 1 of 1

Pattern #	Pattern Name:		Fracture Required?		
1		!		!	

Layer	Number of Placements	Address Units Out (μ)	Final CD Size (μ)	CD Tolerance (μ)	CD Digitized?	Digitized Data Tone
1				+/-		
<i>Patent application</i>	!	!	!	?	!	!

← Save And Back
Save And Stay

Save And Forward →

? =Optional for order
! =Required for submit, optional for this screen
! =Required for this screen

FIG. 5

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Main Menu	Get a Quote/Account	Account	Mask Order	Info	Feedback
				Help	Logout
Instructions	General	Layers	Patterns	Placements	Fractures
				Business	Submit

TestCompany
[View summary](#)
In Progress

Please fill in the X and Y coordinates (in microns from the center of the mask, where the center is defined as 0,0) for every placement in each layer, and press the "Save and Forward" button to progress to *Fracture Information*.

If the number of placements for any layer on this screen is wrong, please return to the Layer Info Screen and change the number of placements, then return to this screen.

← Save And Back
Save And Stay

Save And Forward →

Layers 1 - 1 of 1

Layer Pattern
Placements (Array to-- → columns)

1 Potent Application

Prime-1

Placement 1

X

μ

Y

μ

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← Save And Back
Save And Stay

Save And Forward →

Field Help

X & Y	!	X-values and Y-values are in microns from the center of the mask (where the center is defined as 0,0) and thus can be positive or negative. X- and Y-values for all placements must be completed before the order can be submitted, but can be left blank for the time being if necessary.
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? =Optional for order
! =Required for submit, optional for this screen
! =Required for this screen

FIG. 6

NETWORK-BASED PHOTOMASK DATA ENTRY
INTERFACE & INSTRUCTION GENERATOR FOR
MANUFACTURING PHOTOMASKS

Atty Dkt: 064441.0285

Inventors: Jeffry S. Schepp et al.

Filing Date: 9/8/2003

Sheets: 8 of 12

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Main Menu

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TestCompany View summary In Progress

Please complete the fracture information for every fracture pattern, and press the "Save and Forward" button to progress to *Chip Placement*.

For patterns that are not fractures, you will have to provide a pattern file in either MEBES or CFLT format.

If the number of patterns that are fractures on this screen is wrong, please return to the Pattern Specification Screen and change the Fracture Required values, then return to this screen.

← Save And Back

Save And Stay

Patterns 1 - 1 of 1

Save And Forward →

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Pattern	Fracture?	Database Name	Top Structure	Data Scale	Out
1 Prime-1	Yes	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

GDS Layers !

Layer 1 GDS Layers

Patent Application

Window Limits !

(μ)

Lower Left

X Y

Upper Right

X Y

← Save And Back

Save And Stay

Save And Forward →

⓪ =Optional for order
! =Required for submit, optional for this screen
! =Required for this screen

FIG. 7

FIG. 8

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Main Menu	Get a Quote/Account	Account	Mask Order	Info	Feedback
				Help	Logout
Instructions	General	Layers	Patterns	Placements	Fractures
Business	Submit				
TestCompany			View summary		In Progress

Please complete the business information for your order, and press the "Save and Forward" button to progress to *Submit Order*.

← Save And Back	Save And Stay	Save And Forward →
-----------------	---------------	--------------------

Billing Information	Shipping Information (same as billing)
PO Number: <input type="text"/> !	Street Address: <input type="text"/> !
Street Address: <input type="text"/> !	<input type="text"/> ?
<input type="text"/> ?	City: <input type="text"/> !
City: <input type="text"/> !	State: <input type="text"/> !
State: <input type="text"/> !	Country: <input type="text"/> !
Country: <input type="text"/> !	Postal Code: <input type="text"/> !
Postal Code: <input type="text"/> !	Contact Name: <input type="text"/> !
Contact Name: <input type="text"/> !	Phone: <input type="text"/> !
Phone: <input type="text"/> !	Fax: <input type="text"/> !
Fax: <input type="text"/> !	E-mail: <input type="text"/> !
Email: <input type="text"/> !	

Other Order Information	
Expected Delivery:	<input type="text"/> ? ▼ ▲
Comments/Instructions:	<input type="text"/> ? ▼ ▲

← Save And Back	Save And Stay	Save And Forward →
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? =Optional for order ! =Required for submit, optional for this screen ! =Required for this screen

FIG. 9

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Main Menu	Get a Quote/Account	Account	Mask Order	Info	Feedback		
				Help	Logout		
Instructions	General	Layers	Patterns	Placements	Fractures	Business	Submit

TestCompany RR	View summary	Validated
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Congratulations!
Your order has been validated to contain all necessary information.

Submit the order
Click the button at the bottom of the screen to transmit the order information. You may then FTP the data files for the order.

You must click the button to submit the order. Once you click the button, you will not be able to change any of the order information using the Order Form. Instead, you will have to talk to a customer service representative to change any order information.

→ **FINALIZE ORDER AND SUBMIT** ←

General Order Information Sales order: Site: Customer: Contact: Fab: Device: Product Type: Glass Type: Glass Size: Coating: Defect Criteria: Plot Size: Pellicle Chrome? Pellicle Glass? Stepper: Compact Part: Delivery: Comments:	<div style="border: 1px solid black; height: 150px; margin-bottom: 10px;"></div> Business Information Billing information: <div style="border: 1px solid black; height: 150px; margin-bottom: 10px;"></div> Shipping information: <div style="border: 1px solid black; height: 150px;"></div> Manufacturer-specific Information:
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#	Mask Name	Barcode Text	Registration Tolerance	Defect Size	Defect Density	Mask Parity	Title Parity
1	SYSTEM TEST 1	KDKDKDK	0.150 um	1.0 um	0 def/sq.in	Wrong Reading	Wrong Reading
2	SYSTEM TEST 2	HSHSHSH	0.250 um	0.75 um	1 def/sq.in	Right Reading	Right Reading

FIG. 10A

TO FIG. 10B

FIG. 10B

FROM FIG. 10A

Distinct Patterns

#	Pattern Name	Address Units Out	Final CD Size	Final CD Tolerance	CD Digitized	Digitized Data Tone	Fracture Database Name	Top Structure	GDS Layers	Data Scale Out	Window Limits
1	Prime-1-1	0	1	0	Yes	Dark	JEFF.GDS	MAIN	1,3,5,7	1	(-12000, -15000) (12000, 15000)
2	Scribe-2-2	0	1	0	No	Clear	JEFF.GDS	TOP	2,4,6,8	1	(-10000, -9000) (10000, 9000)

Placement of Patterns on Layers

Layer #	Mask Title	Pattern	X	Y
1	SYSTEM TEST 1		14000	9000
		Scribe-2-2		
			16000	10000
2	SYSTEM TEST 2			
		Scribe-2-2		
			13256	14859